# Student Technology Standards

***STANDARD 1: FUNDAMENTAL OPERATIONS AND CONCEPTS***

Students understand the operations and function of technology systems and are proficient in the

use of technology. (Arizona)

**Basic Operations**

1. Identify the platform, version, properties, function, and interoperability of computing devices including a wide range of devices that compute and/or manage digital media.
2. Use online help and other support to learn about features of hardware and software, as well as to assess and resolve problems.
3. Install and uninstall software; compress and expand files (if the district allows it).
4. Explain effective backup and recovery strategies
5. Explain criteria for evaluating hardware and software appropriate for a given task (e.g., features, versions, capacity).
6. Demonstrate keyboarding techniques, including the use of keyboard shortcuts, to complete assignments efficiently and accurately. (For students with disabilities, demonstrate alternate input techniques as appropriate.)
7. Identify and assess the capabilities and limitations of emerging technologies.

**Word Processing**

1. Apply advanced formatting and page layout features when appropriate (e.g., columns, templates, and styles) to improve the appearance of documents and materials.
2. Use editing features appropriately (e.g., track changes, insert comments).

**Spread Sheet**

1. Define and use functions of a spreadsheet application (e.g., sort, filter, find).
2. Enter formulas and functions; use the auto-fill feature in a spreadsheet application.
3. Explain and use advanced formatting features of a spreadsheet application (e.g., reposition columns and rows, add and name worksheets).
4. Differentiate between formulas with absolute and relative cell references.
5. Use multiple sheets within a workbook, and create links among worksheets to solve problems.
6. Import and export data between spreadsheets and other applications.
7. Explain how various formatting options are used to convey information in charts or graphs.

**Internet, Networking and Online Communications**

1. Use search engines and online directories. Explain the differences among various search engines and how they rank results.
2. Explain and demonstrate effective search strategies for locating and retrieving electronic information (e.g., using syntax and Boolean logic operators).
3. Describe good practices for password protection and authentication.
4. Demonstrate a basic understanding of addressing schemes (e.g., IP addresses, URL addresses, DHCP, DNS).

**Multi-Media**

1. Identify technology tools (e.g., authoring tools) that can be used to create a multimedia product.
2. Use a variety of applications to plan, create, and edit multimedia products (e.g., slide presentations, videos, animations, simulations, podcasts).
3. Link information residing in different applications (e.g., linking a chart in a word-processing document to the spreadsheet where it was created).

**Web Authoring**

1. Distinguish between effective and ineffective Web site designs; explain the reasons.
2. Explain terminology related to Web page authoring (e.g., HTML, URL, links, browsers, plug-ins, Web servers).
3. Use Web-authoring tools to create, edit, and publish well organized Web sites with effective navigation (e.g. wikis, open source website creators)

***STANDARD 2: FUNDAMENTAL OPERATIONS AND CONCEPTS***

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| ***Standard 2. Demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school, and in society.*** |

**Ethics**

1. Demonstrate compliance with the St. Scholastica Academy’s Acceptable Use Policy.
2. Explain issues related to the responsible use of technology (e.g., privacy, security).
3. Identify examples of plagiarism, and discuss the possible consequences of plagiarizing the work of others.
4. Write correct in-text citations and reference lists for text and images gathered from electronic sources.
5. Give examples of the appropriate and responsible use of communication tools (e.g., chats, instant messaging, blogs, wikis).
6. Discuss misuse of technology for personal and commercial reasons (e.g., software piracy, unauthorized file sharing/downloading, virus spreading, and hacking); explain possible consequences.

**Society**

1. Evaluate the authenticity, accuracy, appropriateness, and bias of electronic resources, including Web sites.
2. Analyze the values and points of view that are presented in media messages.

**Health and Safety**

1. Describe and use safe and appropriate practices when participating in online communities (e.g., discussion groups, blogs, social networking sites).
2. Explain and use practices to protect one's personal safety online (e.g., not sharing personal information with strangers, being alert for online predators, reporting suspicious activities).
3. Explain ways individuals can protect their technology systems and information from unethical users.

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| ***Standard 3. Demonstrate the ability to use technology for research, critical thinking, problem solving, decision making, communication, collaboration, creativity, and innovation.*** |

**Research**

1. Devise and demonstrate strategies for efficiently collecting and organizing information from electronic sources.
2. Compare, evaluate, and select appropriate electronic resources to locate specific information.
3. Select the most appropriate search engines and directories for specific research tasks.
4. Search for information within an electronic source (e.g., using the find command).

**Problem Solving**

1. Explain and demonstrate how specialized technology tools can be used for problem solving, decision making, and creativity in all subject areas (e.g., simulation software, environmental probes, computer-aided design, geographic information systems, dynamic geometric software, graphing calculators, art and music composition software).

**Communication**

1. Use a variety of media to present information for specific purposes (e.g., reports, research papers, presentations, newsletters, Web sites, podcasts, blogs), citing sources.
2. Demonstrate how the use of various techniques and effects (e.g., editing, music, color, rhetorical devices) can be used to convey meaning in media.
3. Use online communication tools to collaborate with peers, community members, and field experts as appropriate (e.g., bulletin boards, discussion forums, listservs, Web conferencing).
4. Complete at least one online credit or non-credit course or tutorial; discuss the benefits and disadvantages of this method of learning.